

HARD HANDOFF METHOD BETWEEN AN ASYNCHRONOUS CDMA SYSTEM AND
A SYNCHRONOUS CDMA SYSTEM

ABSTRACT OF THE DISCLOSURE

A hard handoff method between asynchronous CDMA (code division multiple access) system and synchronous CDMA system is provided. A hard handoff method between asynchronous CDMA (code division multiple access) system and synchronous CDMA system in accordance with an embodiment of the present invention includes following steps. First step is to transmit asynchronous CDMA channels from synchronous CDMA base stations with a purpose of synchronizing handoff time at synchronous CDMA base station and code used at synchronous CDMA base station. The transmission is done by a mobile terminal that is in communication with an asynchronous CDMA base station. The transmission is a part of handoff process and the mobile terminal performs hard handoff to synchronous CDMA base station. Second step is to report measured result to the asynchronous CDMA base station on the basis of intensity of asynchronous CDMA pilot channel received from an adjacent synchronous CDMA base station. The reporting is done by the mobile terminal. Third step is to transmit handoff request message to the synchronous CDMA base station on the basis of the measured result. The transmission is done by the asynchronous CDMA base station. Fourth step is to transmit information necessary for handoff to the asynchronous CDMA base station. The transmission is done by the synchronous CDMA base station that receives the handoff request message. Fifth step is to perform hard handoff to the synchronous CDMA base station. The hard handoff is performed by the mobile terminal that receives the information through a traffic channel from the asynchronous CDMA base station.